

# **EXHIBIT G**

# **Rebuttal Expert Report of Dr. Jonathan Mattingly**

August 30, 2024

Pursuant to 28 U.S.C. § 1746, I, Jonathan Mattingly, declare as follows:

I prepared this rebuttal report at the request of Plaintiffs' counsel in *Pierce v. North Carolina Board of Elections* to respond to the report of Dr. Sean Trende. Dr. Trende's discussion of my report is very limited, and he does not appear to dispute any of the conclusions I reached in my report. In this rebuttal report I (a) identify certain errors in Dr. Trende's description of my analysis and (b) provide *Stephenson*-compliant groupings for an additional Demonstration District E provided to me by Plaintiffs' counsel. My background and qualifications are set forth in my initial report.

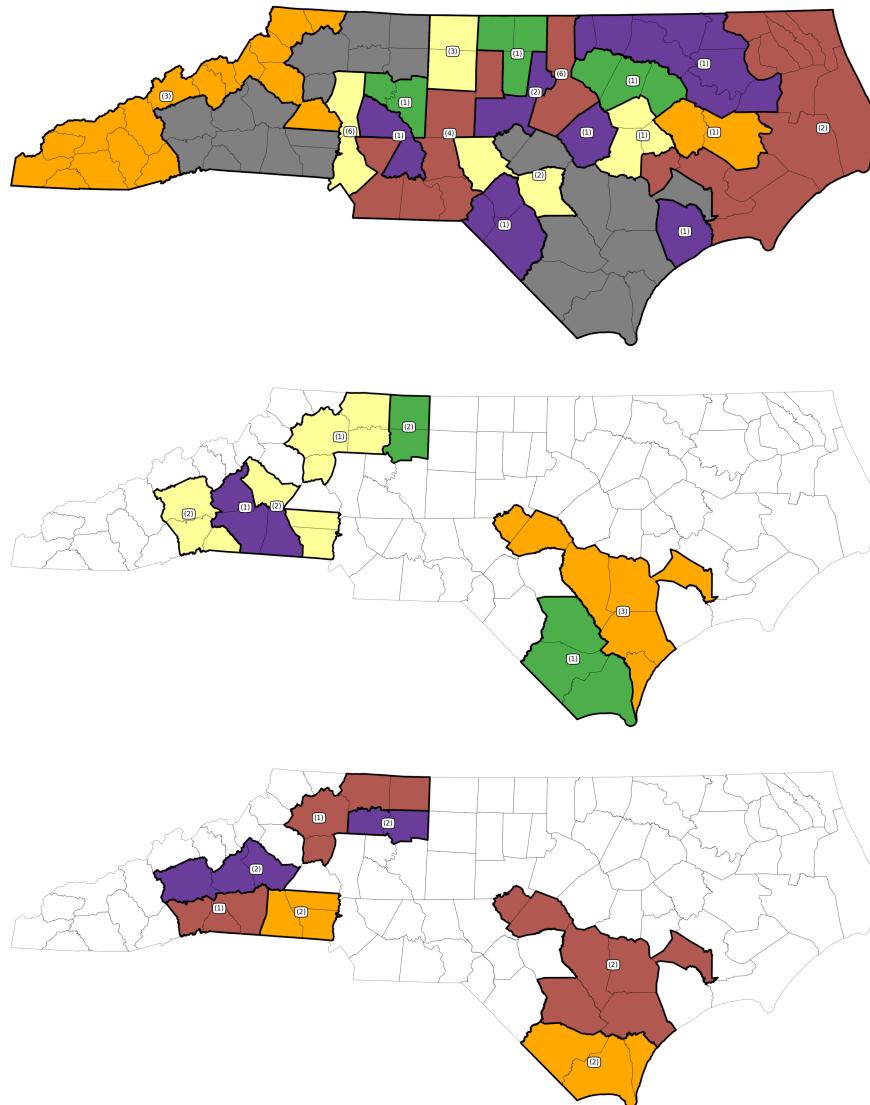
## **I. RESPONSE TO DR. TRENDE**

For my initial report dated May 31, 2024, Plaintiffs' counsel presented me with four demonstration districts – Demonstration Districts A, B, C, and D – and asked me to freeze those demonstration districts and then run my algorithm for determining optimal county clustering options under North Carolina's *Stephenson* rule. As I noted in my report, at Plaintiffs' counsel's direction I froze the Pitt-Edgecombe district when I ran the algorithm only in connection with Demonstration District A.

Dr. Trende states in his report (page 42) that I "force[d] Edgecombe and Pitt counties to remain together" for "Maps A and C," but that is incorrect. When I ran the algorithm using Demonstration District C, I did not freeze a Pitt-Edgecombe district; I froze only Demonstration District C itself. With only Demonstration District C frozen, the algorithm naturally produced an optimal county clustering that paired Pitt and Edgecombe in a county cluster.

Dr. Trende presents a Figure 25 that he labels "Suggested *Stephenson* Groupings, Map A." He states that the groupings in Figure 25 reflect the results of running my *Stephenson* algorithm while freezing Demonstration District A and the Pitt-Edgecombe district. In fact, the groupings in his image are incorrect and do not reflect the results of running my algorithm. Dr. Trende places Washington County in the wrong county cluster.

Dr. Trende presents a Figure 26 that he labels "*Stephenson* Groupings, Map A, if Edgecombe/Pitt are not frozen." I note that my algorithm produces multiple compliant *Stephenson* groupings if Demonstration District A is frozen but the Edgecombe/Pitt district is not frozen. The grouping option presented in Dr. Trende's Figure 26 is one option, but not the only one. We show the fixed clusters along with three regions in the state which each have two possible options below. This produces eight possible county cluster options in total.



*Figure 1 We present of all possible clustering choices when freezing Demonstration District A and not enforcing Pitt-Edgecombe to be a cluster.*

## II. ANALYSIS OF PLAINTIFFS' DEMONSTRATION DISTRICT E

Plaintiffs' counsel asked me to apply the *Stephenson* algorithm that I described in my initial report to an additional demonstration district, which I understand Plaintiffs' counsel is referring to as Demonstration District E. This district consists of Bertie, Gates, Halifax, Hertford, Martin, Northampton, Tyrrell, Warren, Washington, and part of Pasquotank County. As I described in my initial report, there are two possible ways to approach clustering the remaining part of the state when a frozen district splits a county. In this instance, however, both versions of the algorithm produce clustering options that are identical. We find that there are eight possible county cluster options, because there are three regions in the state that each have two independent choices for clusters. In all cases, 16 counties must be split when drawing districts.

We begin by displaying the county clusters that are consistent across all eight county cluster options. We then present two figures each that contain one of two unique and independent choices for the three remaining regions of the state. With the exception of the two-district cluster in the Eastern portion of the state, all other county clusters may be chosen to be identical to those used in the clusters in the enacted 2023 map.

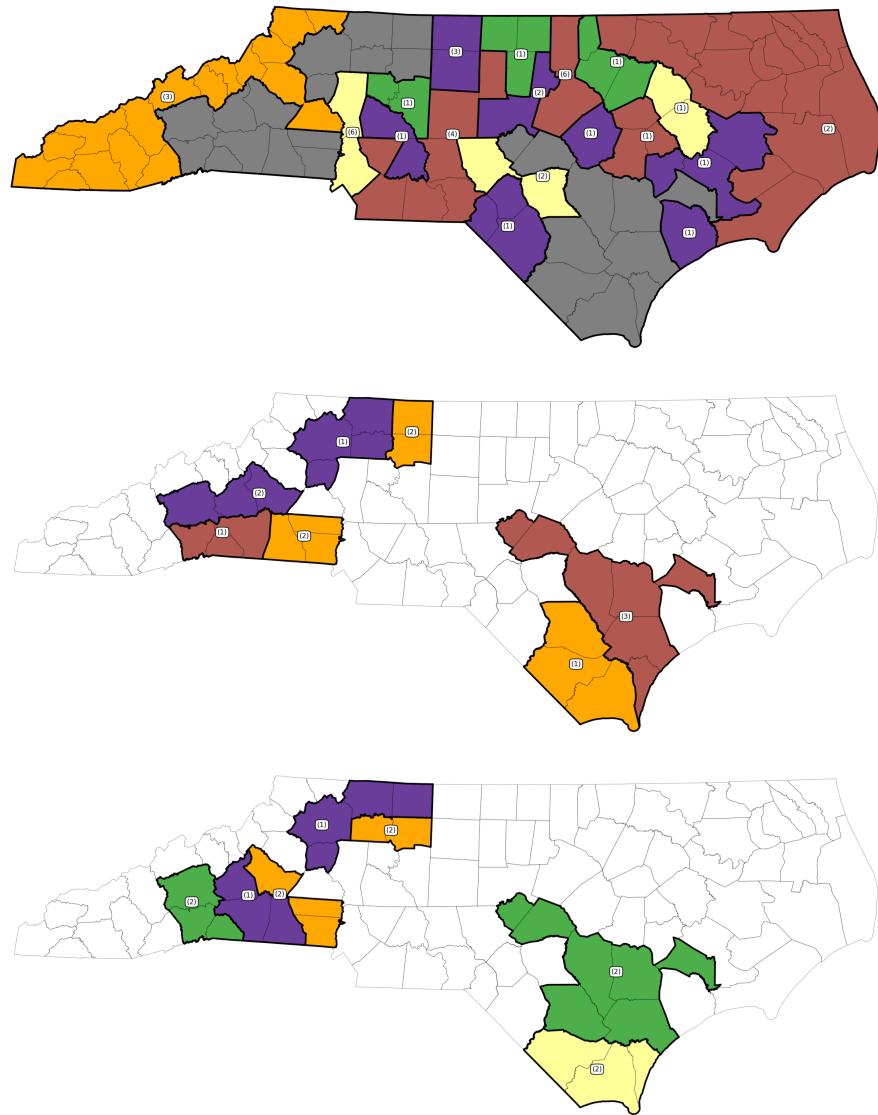


Figure 2: We present the resulting clusters with Demonstration District E fixed.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 30, 2024

Jonathan Mattingly